

## Citizen Summary Air permit modifications **BP Products North America Inc., Whiting Business Unit** www.idem.IN.gov

March 13, 2008 [rev.]

# **Citizen Summary**

This document is a summary of the changes proposed at the BP refinery in Whiting, Indiana. The summary explains the permitting process and how citizens can participate.

## Draft permits for BP Products North America Inc., Whiting Business Unit

Significant Source Modification 089-25484-00453 Significant Permit Modification 089-25488-00453

#### The purpose of the permit modification

BP Products North America Inc., Whiting Business Unit requested approval from the Indiana Department of Environmental Management (IDEM) to modernize the equipment at their refinery and terminal and increase the plant's capacity to process more Canadian crude oil. The permit modifications evaluate air emissions that are legally regulated by Indiana and the United States Environmental Protection Agency (U.S. EPA).

## Operations at the facility

BP owns and operates a refinery and terminal on Indianapolis Boulevard, in northwest Indiana and is located in the communities of Whiting, East Chicago and Hammond, Indiana. It processes various types of crude oil and creates petroleum products.

#### Air emissions sources at the refinery and terminal

- The refining process creates emission by-products
- Refining equipment operates by burning fuel and releasing air emissions
- Moving solid materials creates dust
- Safety and pollution control equipment create some air emissions
- The terminal releases emissions when liquid products are moved from one container to another

#### Type of permit

BP currently operates under a Part 70 Operating Permit (also known as a Title V permit). To proceed with the Canadian crude oil project, BP submitted a request to modify their existing permit on November 1, 2007. IDEM split their request into two permits: a significant source modification and a significant permit modification.

- The source modification allows the facility to add or change equipment at the facility. New construction or modification to existing equipment is not allowed without prior approval.
- The permit modification allows the facility to operate the equipment once construction has completed. The permit modification will undergo U.S. EPA review before it is issued.

#### Will emissions increase or decrease?

Regulated air emissions from the Whiting facility will decrease after the modernization project is completed. BP will reduce emissions by:

- 1. Adding pollution controls;
- 2. Replacing older equipment with more efficient units; and,
- 3. Removing recently-eliminated equipment from operations.

Increasing BP's capacity to refine more Canadian crude oil will create new emissions, but the decreases from emission reductions are larger than the project increases. The end result will be lower regulated air emissions.

## How will this affect my air quality?

The proposed draft permit allows for equipment upgrades that will reduce each of BP's emissions regulated under the Clean Air Act. The area currently does not meet U.S. EPA health-based standards, so facility operations and emissions are held to stricter U.S. EPA guidelines.

### The proposed modifications

BP will shut down, upgrade, or replace older equipment at the Whiting refinery and terminal, as well as add new equipment to expand refining. The permit will make these changes, some of which are voluntary, permanent and enforceable under IDEM regulations.

The following units will be upgraded, replaced or implemented:

- Cokers equipment that processes heavy crude into fuel
- Material handling systems crushers, conveyors, storage and loading systems
- Flares natural-gas powered flames that control volatile organic compound (VOC) emissions
- Storage and wastewater treatment tanks
- Gas Oil Hydrotreater (GOHT) refinery equipment that reduces sulfur and nitrogen
- Hydrogen Unit creates pure hydrogen
- Dewatering and thermal desorption system processes sludge
- Isomerization Unit creates high octane gasoline blending components
- Vapor recover unit controls vapor releases when transferring gasoline between containers
- Duct burners heats up exhaust before moving it to pollution controls
- Process heaters, cooling towers, heating and burning units, boilers
- Leak detection and repair equipment program

The following equipment will be shut down permanently:

- Older process heaters
- Fluidized Bed Incinerator processed sludge
- Ultraformer unit created gasoline blending material and chemical feedstocks

#### What happens next in the permitting process?

IDEM's permitting process includes opportunities for the public to comment on significant modifications to existing air permits. The public comment period ends on Friday, March 21, 2008. Since the 21<sup>st</sup> falls on a holiday, the public has until March 24, 2008 to mail, hand-deliver or e-mail comments to IDEM. Please send comments to IDEM at 100 North Senate Avenue, Mail Code 61-53 IGCN 1003, Indianapolis, IN 46204-2251 or via e-mail at <a href="mmoulik@idem.in.gov">mmoulik@idem.in.gov</a>.

Prior to making a decision about the permits, IDEM will consider the written and oral comments. Groups or individuals commenting on the permit who provide a name and address will receive notice when IDEM decides to issue or deny the permit. Both decisions are subject to an appeal process that is outlined in the notice of decision, a document that explains the agency's final ruling.

#### Disclaimer

This Citizen's Summary to the BP Products North America Inc., Whiting Business Unit draft source and permit modifications is intended to help citizens understand the permits and the permitting process. This is not a legally-binding document and it has not been reviewed by U.S. EPA or BP Products North America Inc. The permit will be the legally-binding document that contains BP's regulatory requirements.